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## ABSTRACT

This study examined the influences of three parenting variables on children's school achievement: commitment to children's school achievement, demandingness, and responsiveness. The study also examined the influence of maternal employment and satisfaction with employment on the three parenting variables and on children's achievement. Questionnaires completed by 79 ninth-graders measures parenting variables and school achievement; questionnaires completed by mothers measured maternal employment and employment satisfaction. In working class families, maternal and paternal demandingness, responsiveness, and commitment were related to boys', but not girls', achievement. There was no relationship in middle class families. Maternal employment was not related to school achievement. Maternal satisfaction with employment was related to school achievement for boys. For mothers who were not employed, maternal employment satisfaction was related to demandingness. A list of 21 references is included. (BC)

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# Maternal Employment and Adolescent Achievement

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## Maternal Employment and Adolescent Achievement: Effects of Demandingness, Responsiveness, and Commitment to Achievement

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Poster presented at Society for Research in Child Development, Seattle, WA, April 1991

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This paper reports only a portion of the data and results from the doctoral dissertation of the first author. Questions or comments should be forwarded to Sharon E. Paulson, Department of Educational Psychology, Ball State University, Muncie, IN 47306.

## Abstract

The purposes of this study were (a) to explore the specific dimensions of parenting which might be related to adolescent achievement outcome, (b) to explore the effects of maternal employment on these dimensions of parenting, and (c) to test the mediating effects of these parenting characteristics between maternal employment and achievement. Seventy-nine ninth-grade boys and girls and their parents responded to questionnaires. Multiple regression analyses revealed that both maternal and paternal demandingness, responsiveness, and commitment to achievement were significantly related to achievement outcome in boys but not in girls. Interactions between maternal employment and satisfaction with employment revealed effects on achievement and on maternal demandingness, however demandingness did not mediate the influences on achievement.

### Introduction

Traditionally, in the study of the effects of maternal employment, researchers have looked at either the direct effects of maternal employment on children's developmental outcomes (such as achievement) or the effects of maternal employment on family processes. In general, research which examined the effects of family processes on school achievement found that child-rearing practices and parental commitment to achievement were directly related to achievement outcomes (see Hess & Holloway, 1984, for a review; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). In turn, the research which examined the effects of maternal employment on family processes found relations between maternal employment and child-rearing practices and between maternal employment and the type of independence training conducive to high levels of achievement (see Hoffman, 1974, 1980; Montemayor & Clayton, 1983; Bronfenbrenner & Crouter, 1982, for reviews). It seemed reasonable to assume that it was the effects of maternal employment on these child-rearing variables which created the direct effects of maternal employment on achievement. Such mediating influences of child-rearing variables have been suggested by several authors, (Hoffman, 1974; Bronfenbrenner & Crouter, 1982; Montemayor & Clayton, 1983), and after reviewing this literature, Bronfenbrenner and Crouter (1982) called for a research agenda to look at the influences these family processes may have between maternal employment and children's outcomes. The purpose of this study was to describe the differences in the family context between families in which the mother was employed and families in which the mother was not employed and to examine the role these differences may play in mediating the effects of maternal employment on achievement outcome among adolescents.

### *Family Context and Achievement*

In a major review of the research on family influences on achievement, Hess and Holloway (1984) discussed characteristics of the parent-child relationship and child-rearing techniques which were found to have the most consistent relations with achievement. In general, high levels of verbal interaction between mothers and their children, high expectations of parents for their children's achievement, and positive parental beliefs and attributions about their children's abilities were found to be positively related to high levels of achievement outcome.

Additionally, parents' involvement at school was found to have an effect on their children's school achievement (Linney & Vernberg, 1983 cite a number of unpublished works on this subject).

Affective relationships between parents and children and discipline and control strategies have been found to be related to achievement as well. These parenting behaviors (level of affect and level of control) have been used to represent two dimensions of parenting called responsiveness and demandingness, respectively (Maccoby & Martin, 1983). The interplay between responsiveness and demandingness are evident in Baumrind's typology of parenting style (Baumrind, 1971). Research has found that children of authoritative parents have higher levels of achievement than children of either authoritarian or permissive parents, suggesting that high levels of both demandingness and responsiveness are more conducive to positive achievement outcome (Baumrind, 1967, 1971; Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh, 1987).

*Choices for the current study.* For the purposes of this study, the influences of three parenting variables on achievement were studied. The parenting characteristics which were investigated were: (a) parental commitment to achievement which included parental values about achievement, parental interest in their adolescents' academic work, and parental involvement in school functions (these aspects were included as subscales of the commitment to achievement measure so that the specific areas could be explored individually); (b) demandingness (as a dimension of parenting style) which included discipline and control strategies and rule behaviors; and (c) responsiveness (as a dimension of parenting style) which included parents' openness to their children's needs and parents allowing their children to have a say in decisions.

### *Maternal Employment and Achievement*

In a review of the literature on the effects of maternal employment on the achievement of school-aged children, Hoffman (1980) noted that maternal employment implies changes in aspects of family structure and functioning, including child-rearing practices and academic orientations. Many of the studies found no differences between children of employed mothers and those of non-employed mothers on measures of achievement when controlling for age, sex,

social class, family size, and level of maternal education. However, those studies which explored these family characteristics more systematically found a number of differences depending on the gender of the child and the social class of the family. In general, children in rural and working class families had greater achievement when mothers were employed than when they were not employed; whereas sons in middle class families had greater achievement when mothers were not employed than when they were employed. Daughters showed no differences in middle class families. Later work with 10 year-olds supported these findings (Gold & Andres, 1978a), although the pattern was not found in adolescents (ages 14-16 years; Gold & Andres, 1978b).

Early work which examined the influences of maternal employment on family functioning found that children in families where the mother was employed were given more household chores than those children in families where the mother was not employed (see Hoffman, 1974 for a review). Although more household chores may imply more rules, no differences were found in the number of rules in these families. Nevertheless, children of employed mothers were found to have more disagreements with their parents. Whereas maternal employment (especially part-time employment) has been found to have positive effects on the mother-daughter relationship (see Hoffman, 1974 for a review), full-time employment has been found to have negative effects on the father-son relationship, but only in working-class families. More recent work has reported fewer effects of maternal employment on family functioning, however, the small number of studies in the past ten years using the adolescent age group makes it difficult to establish any consistency in these patterns. Montemayor (1984) found no differences in the number of household chores that adolescents have in the two family role structures, but sons of employed mothers had more disagreements with their mothers than sons of non-employed mothers. In a study of seventh-graders, Paulson, Koman, and Hill (1990) found no differences in the number of rules or in the number of disagreements among families of mothers employed full-time, employed part-time, and not employed.

Although no direct study of the effects of maternal employment on parents' commitment to achievement (or parental expectations of achievement) exists, the results of the studies discussed imply relations between maternal employment and those aspects of parent-child



relationships which have been found to be related to achievement. Differences in disagreements over rules, numbers of rules, and positive parent-child relationships are all suggestive of differences in parenting style (including demandingness and responsiveness) as well as those characteristics of independence training which are conducive to higher achievement.

### *Questions*

*Question 1:* Are mothers' and fathers' demandingness, responsiveness and commitment to achievement related to their adolescents' achievement in school?

*Question 2:* Does maternal employment status and satisfaction with employment status influence achievement outcome in adolescents?

*Question 3:* Do maternal employment status and satisfaction with employment status influence demandingness, responsiveness, and commitment to achievement?

*Question 4:* Do the family characteristics of demandingness, responsiveness, and commitment to achievement mediate the influences of maternal employment status and satisfaction with employment status on achievement?

### *Method*

#### *Subjects*

Subjects for this study were 79 ninth grade boys ( $n=33$ ) and girls ( $n=46$ ) and their parents, recruited from public schools in a suburban county in the Southeast. All ninth graders and their parents from two county high schools, chosen to assure a wide-range of socioeconomic status, were asked to participate. The only criterion for selection was that the students lived with two parents (they may or may not be natural parents). Birth order and number of siblings were allowed to vary randomly.

#### *Procedure*

Questionnaires were mailed to the homes of all the ninth-graders from the two high schools who responded positively to an earlier letter requesting their participation. About 50%

of the families completed and returned the questionnaires (although only 14% of all families originally contacted participated).

### *Measures*

*Achievement Outcome.* The measure of adolescent achievement was obtained from the adolescents' own reports of their course grades for the current grading period in school. Grade point average was calculated by averaging the grades reported on five core courses using a 4-point grading scale (A=4.0, B=3.0, C=2.0, D=1.0, F=0).

*Maternal employment status and satisfaction with employment.* Maternal employment status was assessed by asking mothers whether they worked outside the home full time, part time, or not at all and by asking for the average number of hours they worked per week. Maternal satisfaction was measured with 2 items which assessed whether (a) mothers liked their current status as employed or not employed and (b) whether they were satisfied with the work that they did. These items were included in the mothers' questionnaires. Mothers responded to the items with one of four possible responses ranging from "very satisfied" to "very dissatisfied." Due to the relatively low frequency of "dissatisfied" responses, scores were dichotomized into "very satisfied" and "not very satisfied."

*Demandingness.* Adolescents responded to 15 items using a 5-point scale ranging from "Very Unlike My Mother (Father)" to "Very Like My Mother (Father)." Adolescents responded to the items twice: once in reference to their mother and again in reference to their father. The order of the maternal and paternal items was altered on half of the questionnaires to avoid order effects on possible response bias. Total scores were obtained by averaging across all items with higher scores indicating higher levels of demandingness (separate totals were obtained for maternal and paternal demandingness). Cronbach alphas for adolescents' reports of maternal and paternal demandingness were .82 and .90, respectively.

*Responsiveness.* Adolescents responded to 15 items using the same response scale as for the demandingness measure. Cronbach alphas for adolescents' reports of maternal and paternal responsiveness were .87 and .86 respectively.

*Commitment to Achievement.* Responses were made to the 22 items using the same



response scale used for the demandingness and responsiveness measures. Cronbach alphas for adolescents' reports of maternal and paternal commitment to achievement were .83 and .74, respectively. The measure was developed using three subscales: achievement values, interest in schoolwork, and involvement in school functions. Cronbach alphas for maternal values, interest in schoolwork, and involvement in school functions were .73, .77, and .67, respectively. Alphas for paternal values, interest in schoolwork, and involvement in school functions were .77, .71, and .61, respectively.

### Results

*Question 1: Are mothers' and fathers' demandingness, responsiveness, and commitment to achievement related to their adolescents' achievement in school?*

Due to the interrelations among the parenting characteristics, assessed with Pearson correlation coefficients, simultaneous multiple regression analyses were employed entering demandingness, responsiveness, and the three subscales of commitment to achievement together to see whether the combination of parenting behaviors was predictive of achievement. Separate analyses were run for maternal and paternal measures within families with a target boy and within families with a target girl. Similar analyses were run for middle class families and for working class families separately (see Table 1).

In families with a target boy (see Table 1), the multiple regression analyses revealed that maternal demandingness, responsiveness, and commitment to achievement together explained a significant proportion of variance in achievement outcome ( $R^2=.42, p<.01$ ). Inspection of the semi-partial correlations revealed that maternal demandingness ( $r_{sp}=.36, p<.05$ ), achievement values ( $r_{sp}=.44, p<.01$ ) and interest in schoolwork ( $r_{sp}=-.32, p<.05$ ) provided significant unique contributions to the prediction of achievement in boys above and beyond the other maternal parenting behaviors. Paternal demandingness, responsiveness, and commitment to achievement also explained a significant proportion of the variance in achievement outcome in boys ( $R^2=.45, p<.01$ ). And, paternal achievement values ( $r_{sp}=.39, p<.05$ ), interest in schoolwork ( $r_{sp}=-.39, p<.05$ ), and involvement in school functions

( $r_{sp}=.30, p<.05$ ) predicted significant proportions of variance in achievement in boys above and beyond other paternal parenting behaviors. Neither maternal nor paternal parenting behaviors combined to influence achievement outcome in girls (see Table 1).

Maternal (but not paternal) demandingness, responsiveness, and commitment to achievement were related to achievement outcome in working class families with demandingness ( $r_{sp}=.34, p<.05$ ), responsiveness ( $r_{sp}=.38, p<.01$ ), achievement values ( $r_{sp}=.46, p<.01$ ), and interest in schoolwork ( $r_{sp}=-.43, p<.01$ ) providing unique contributions to its prediction. Neither maternal nor paternal parenting behaviors combined to predict any variance in achievement in middle class families (see Table 1).

*Question 2: Does maternal employment status and satisfaction with employment status influence achievement outcome in adolescents?*

Three-way analyses of variance were used to explore maternal employment and satisfaction with employment differences in achievement outcome. Maternal employment status (employed full time, employed part-time, and not employed), satisfaction with employment status (very satisfied and not very satisfied), and satisfaction with the work itself (very satisfied and not very satisfied) were the three independent variables and achievement outcome was the dependent variable. Separate analyses were run for boys, for girls, for working class, and for middle class. Results of all of the analyses are shown in Table 2. Significant differences were found only in the subsample of boys. A main effect for satisfaction with employment status revealed that boys whose mothers were very satisfied with their employment had higher levels of achievement ( $M=2.7$ ) than did boys whose mothers were not very satisfied with their employment status ( $M=2.1$ ),  $F(1,25)=4.83, p<.05$ . A significant maternal employment status by satisfaction with employment status interaction revealed that it was only those boys whose mothers were not employed and not very satisfied with their employment status who had lower levels of achievement ( $M=1.28$ ) than did all other boys (means ranged from 2.46 to 3.13),  $F(2,25)=6.55, p<.01$ . Note that boys whose mothers were not employed and were very satisfied with the status had the highest achievement ( $M=3.13$ ). (A Duncan multiple range test was used to analyze significant interaction effects.)

*Question 3:* Do maternal employment status and satisfaction with employment status influence demandingness, responsiveness, and commitment to achievement?

Three-way analyses of variance were used again to explore maternal employment and satisfaction with employment differences in demandingness, responsiveness, and commitment to achievement. Separate analyses were run for each gender and for each socio-economic status group. Because effects of maternal employment on achievement (Question 2) were found only in boys, only results of the ANOVAs for boys are shown in Table 3. In boys, a significant maternal employment by maternal satisfaction with employment interaction was found for maternal demandingness ( $F(2,25)=6.38, p<.01$ ). Mothers who were not employed were more demanding when they were very satisfied with their employment status than when they were not very satisfied with their status.

*Question 4:* Do the family characteristics of demandingness, responsiveness, and commitment to achievement mediate the influences of maternal employment status and satisfaction with employment on achievement?

In boys, maternal satisfaction with employment (in non-employed mothers) predicted achievement outcome (Question 2) as well as maternal demandingness (Question 3). In turn, both maternal and paternal demandingness, responsiveness, and commitment to achievement significantly predicted achievement outcome in boys (Question 1). An analysis of covariance was used to test the mediating influences in the subsample of boys. Maternal employment status, satisfaction with employment status, satisfaction with work were the independent variables and achievement outcome was the dependent variable. Maternal and paternal demandingness were used as covariates. Results are shown in Table 4. Contrary to prediction, maternal satisfaction with employment status (in non-employed mothers) continued to predict a significant proportion of the variance in achievement outcome above and beyond that being predicted by maternal and paternal demandingness. This finding suggested that it was not simply the variance in demandingness predicted by maternal satisfaction which predicted achievement outcome, therefore parental demandingness was not the mediating factor for the effects of maternal satisfaction on achievement.

### Discussion

The results of this study do not support earlier findings that maternal employment status affected achievement outcome in adolescents, but they were in agreement with several recent studies that similarly failed to find relations between maternal employment and achievement outcome (Crouter, MacDermid, McHale, & Perry-Jenkins, 1990; Bogenschneider, 1990; and Grolnick & Ryan, 1989). As a result, mediating effects could not be explored for the influence of maternal employment on achievement. The family factors, identified as possible mediating variables in this study, were found to be important contributors to achievement however, and further exploration of these parenting characteristics may provide further insight into the influences of the family context on adolescent outcomes. Gender and social class differences were especially pronounced and warrant further investigation in future research, as well. It is important to note, however, the limitations of this study which make the interpretation of the findings difficult to generalize. The low return rate of the questionnaires may have created a selection bias which may explain some of the findings to be discussed. The small sample size was a limitation which also may have prevented the detection of significant findings which may have been more evident with a larger sample. Only small proportions of the variance in achievement were expected to be predicted, therefore the small sample size made these differences difficult to find.

#### *Family Influences on Achievement Outcome*

As predicted, in families with a target boy, both maternal and paternal demandingness, responsiveness, and commitment to achievement predicted a significant proportion of the variance in achievement outcome (42% and 45% for mothers and fathers, respectively). Although it has been suggested that mothers have more influence than fathers in children's discipline (Hoffman, 1974; Bronfenbrenner & Crouter, 1982; Hess & Holloway, 1984), it was found that both mothers and fathers parenting practices have important influences on achievement outcome in boys.

No significant relations were found between the parenting behaviors and achievement outcome in girls. A number of explanations may be possible. During the transition to

adolescence, increased parental control of girls has been found to be evident as girls begin dating and becoming more social (Hill, 1980a; Collins, 1990). Girls may react more positively to moderate levels of demandingness than to either very low or very high levels. Analyses of curvilinear effects of demandingness may provide further insight into this possibility. It may be possible that influences from other developmental contexts (i.e. peers and school) are more important to the achievement outcome in girls than familial influences. The limited sample size also may explain the lack of expected findings in girls. Because the family is only one of several factors which contribute to the achievement of adolescents, only small proportions of the variance in achievement were expected to be found. The small sample size may have made detection of small effects difficult. A larger sample would help to find small proportions of variance in achievement which the family may account for in girls.

The expectation that demandingness, responsiveness, and commitment to achievement would be predictive of achievement outcome was supported in working class families but not in middle class families. Culturally, middle class adolescents may be expected to achieve higher grades than their working class counterparts. These expectations come from a number of contexts including peers, school, and society in general. The importance of familial influences may be overshadowed by the numerous influences at play. Also, small proportions of variance may not have been detected due to the small sample. In working class families, maternal influences were found to predict 45% of the variance in adolescent achievement. High levels of both demandingness and responsiveness as well as high achievement values were predictive of higher levels of achievement. Although working class families may not normally portray high levels of responsiveness or achievement values, the effects may be quite positive when they do. The results in working class families also suggested that mothers were more involved with parenting than fathers. It was difficult to speculate about why this difference may be evident. Perhaps other, as yet unexplored, paternal parenting characteristics are more important in considerations of achievement outcome than those studied here. General differences between working and middle class families may have contributed to the class differences as well. Economic factors, cultural attitudes about maternal employment, achievement motivations, the



nature of the work in their jobs, and social support may be a few factors which need to be explored in order to fully understand the differences that were found.

### *Influences of Maternal Employment*

Contrary to the abundance of literature on the effects of maternal employment on adolescent outcomes (see Hoffman, 1980 and Montemayor & Clayton, 1983, for reviews), maternal employment status did not effect achievement outcome or parenting behaviors in this sample of ninth grade boys and girls. However, maternal satisfaction with employment did have effects on parenting behaviors and on achievement outcome in boys, although small cell sizes made these findings difficult to interpret. Recent studies have similarly found that maternal employment status does not have an effect on achievement outcome (Crouter et al., 1990; Grolnick & Ryan, 1989; Bogenschneider, 1990) or on parenting (Paulson et al., 1990; Orthner, 1990).

One possible reason for these results may be sampling. As volunteers in this study, the adolescents in this sample may be biased towards those with high levels of achievement in general and few problems in school. Parents, who also had to agree to participate in the study, may not have agreed to fill out the questionnaire if they had abnormal parenting characteristics. The sample was probably biased towards healthy, well-functioning families regardless of socio-economic status or maternal employment status. The sample size also made the detection of small variations in achievement outcome difficult to detect.

Another possibility for these results was the cohort of subjects. Most of the literature which looked at the effects of maternal employment on adolescent outcomes is very dated (pre-1980; with most from the 1960s and early 1970s). Attitudes towards maternal employment have changed considerably in the past ten years. Because mothers feel less guilty about their roles today, fewer differences can be found in families where mothers are employed. Most of the mothers in this sample were satisfied with their employment status and with their work regardless of their employment status. (This finding also provided support for the contention that this sample was biased towards healthy, well-functioning families as previously discussed.) Research has suggested that maternal satisfaction may be a more important predictor of



adolescent outcomes than employment *per se* (Hoffman, 1974; Lerner & Galambos, 1986). Lack of variability in maternal satisfaction (probably a cohort effect) precluded finding any major differences due to satisfaction. A study with a larger sample is needed to decide whether the effects are not present in this cohort of families or if they are just very small. Because only small variations in achievement were expected to be due to family factors, further study may be necessary to find them.

## References

- Baumrind, D. (1967). Child care practices anteceding three patterns of pre-school behavior. *Genetic Psychology Monographs*, 75, 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs*, 4 (1, Part 2).
- Bogensneider, K. (1990, March). *Maternal employment, parental involvement, and adolescents' academic achievement: A process perspective*. Paper presented at the Third Biennial Meetings of the Society for Research on Adolescence, Atlanta.
- Bronfenbrenner, U. & Crouter, A.C. (1982). Work and family through time and space. In S.B. Kamerman & C.D. Hayes (Eds.) *Families that work: Children in a changing world*, Washington, D.C.: National Academy Press.
- Collins, W.A. (1990). Parent-child relationships in the transition to adolescence: Continuity and change in interaction, affect, and cognition. In R. Montemayor, G.R. Adams, and T.P. Gullotta (Eds.), *From childhood to adolescence: A transitional period?* (pp. 85-106). Newbury Park, CA: Sage.
- Crouter, A.C., MacDermid, S.M., McHale, S.M., & Perry-Jenkins, M. (1990). Parental monitoring and perceptions of children's school performance and conduct in dual- and single-earner families. *Developmental Psychology*, 26, 649-657.
- Dornbusch, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F., Fraleigh, M.J. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58, 1244-1257.
- Gold, D. & Andres, D. (1978a). Developmental comparisons between ten-year-old children with employed and nonemployed mothers. *Child Development*, 49, 75-84.
- Gold, D. & Andres, D. (1978b). Comparisons of adolescent children with employed and nonemployed mothers. *Merrill Palmer Quarterly*, 4, 243-254.
- Grolnick, W.S., & Ryan, R.M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81, 143-154.
- Hess, R.D. & Holloway, S.D. (1984). Family and school as educational institutions. In R.D. Parke (Ed.) *Review of child development research*. (Vol. 7, pp. 179-222). Chicago: University of Chicago Press.
- Hill, J.P. (1980a). The family. In M. Johnson (Ed.), *Toward adolescence: The middle school years. The seventy ninth yearbook of the National Society for the Study of Education*, (pp. 32-55). Chicago: University of Chicago Press.
- Hoffman, L.W. (1974). Effects of maternal employment on the child--A review of the research. *Developmental Psychology*, 10, 204-228.
- Hoffman, L.W. (1980). The effects of maternal employment on the academic attitudes and performance of school-aged children. *School Psychology Review*, 9, 319-335.
- Lerner, J.V. & Galambos, N.L. (1986). Child development and family change: The influences of maternal employment on infants and toddlers. In L.P. Lipsitt & C. Rovee-Collier (Eds.), *Advances in infancy research*, (Vol. 4, pp. 40-86). Hillsdale, NJ: Ablex.
- Linney, J.A. & Vernberg, E. (1983). Changing Patterns of parental employment and the family-school relationship. In C.D. Hayes & S.B. Kamerman (Eds.), *Children of working parents: Experiences and Outcomes*, (pp. 73-99). Washington, D.C.: National Academy Press.
- Maccoby, E.E. & Martin, J.A. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen (Ed.), *Handbook of child psychology*, (Vol. 4, pp. 1-101). New York: Wiley.
- Montemayor, R. & Clayton, M.D. (1983). Maternal employment and adolescent development. *Theory into Practice*, 22, 112-118.
- Montemayor, R. (1984). Maternal employment and adolescents' relations with parents, siblings, and peers. *Journal of Youth and Adolescence*, 13, 543-557.
- Orthner, D.K. (1990). Parental work and early adolescence: Issues for research and practice. *Journal of Early Adolescence*, 10, 246-259.
- Paulson, S.E., Koman, J.J., III, & Hill, J.P. (1990). Maternal employment and parent-child relations in families of seventh-graders. *Journal of Early Adolescence*, 10, 279-290.

**Table 1**  
**Summary of Multiple Regression Analyses of the Influence of Demandingness,**  
**Responsiveness and Commitment to Achievement on Achievement Outcome by Gender**

| Variables Entered        | Adolescents'<br>Reports of Mothers |     |       | Adolescents'<br>Reports of Fathers |     |       |
|--------------------------|------------------------------------|-----|-------|------------------------------------|-----|-------|
|                          | $r_{sp}$                           | $R$ | $R^2$ | $r_{sp}$                           | $R$ | $R^2$ |
| Boys ( $n=33$ )          |                                    | .65 | .42** |                                    | .67 | .45** |
| Demandingness            | .36*                               |     |       | .18                                |     |       |
| Responsiveness           | .27                                |     |       | -.17                               |     |       |
| Values towards Ach       | .44**                              |     |       | .39*                               |     |       |
| Interest in schoolwork   | -.32*                              |     |       | -.39*                              |     |       |
| School functions         | .13                                |     |       | .30*                               |     |       |
| Girls ( $n=45$ )         |                                    | .35 | .12   |                                    | .19 | .04   |
| Demandingness            | ----                               |     |       | ----                               |     |       |
| Responsiveness           | ----                               |     |       | ----                               |     |       |
| Values towards Ach       | ----                               |     |       | ----                               |     |       |
| Interest in schoolwork   | ----                               |     |       | ----                               |     |       |
| School functions         | ----                               |     |       | ----                               |     |       |
| Middle Class ( $n=39$ )  |                                    | .36 | .13   |                                    | .32 | .10   |
| Demandingness            | ----                               |     |       | ----                               |     |       |
| Responsiveness           | ----                               |     |       | ----                               |     |       |
| Values towards Ach       | ----                               |     |       | ----                               |     |       |
| Interest in schoolwork   | ----                               |     |       | ----                               |     |       |
| School functions         | ----                               |     |       | ----                               |     |       |
| Working Class ( $n=39$ ) |                                    | .67 | .45** |                                    | .38 | .15   |
| Demandingness            | .34*                               |     |       | ----                               |     |       |
| Responsiveness           | .38**                              |     |       | ----                               |     |       |
| Values towards Ach       | .46**                              |     |       | ----                               |     |       |
| Interest in schoolwork   | -.43**                             |     |       | ----                               |     |       |
| School functions         | -.17                               |     |       | ----                               |     |       |

*Note:*  $R$ =Multiple correlation coefficient,  $r_{sp}$ =semi-partial correlation coefficient.

Semi-partial coefficients are shown for each of the variables entered only if the multiple correlation for that equation is significant. \* $p<.05$ , \*\* $p<.01$ .

Table 2

Summary of Analyses of Variance of the Influence of Maternal Employment and Satisfaction with Employment on Achievement Outcome

| Analysis                         | F-values for each analysis |                 |              |              |
|----------------------------------|----------------------------|-----------------|--------------|--------------|
|                                  | Boys<br>(n=33)             | Girls<br>(n=45) | MC<br>(n=39) | WC<br>(n=39) |
| Overall ANOVA                    | 3.00*                      | .75             | .82          | 1.19         |
| Maternal Employment              | 1.04                       | ----            | ----         | ----         |
| Satisfaction with Employment     | 4.83*                      | ----            | ----         | ----         |
| Satisfaction with Work           | .12                        | ----            | ----         | ----         |
| Mat Emp x Satisfaction with Emp  | 6.55**                     | ----            | ----         | ----         |
| Mat Emp x Satisfaction with Work | .88                        | ----            | ----         | ----         |

Note. MC=middle class, WC=working class; \* $p < .05$ , \*\* $p < .01$

Table 3

Summary of Analyses of Covariance of the Influence of Maternal Employment and Satisfaction with Employment on Achievement for Boys

| Analysis                         | F-values |
|----------------------------------|----------|
| Overall ANOVA                    | 2.16*    |
| Maternal Employment              | .50      |
| Satisfaction with Employment     | .13      |
| Satisfaction with Work           | 1.13     |
| Mat Emp x Satisfaction with Emp  | 6.38**   |
| Mat Emp x Satisfaction with Work | .11      |

\* $p < .05$ , \*\* $p < .01$

Table 4

Summary of Analyses of Covariance of the Influence of Maternal Employment and Satisfaction with Employment on Achievement for Boys

| Analysis                         | F-values |
|----------------------------------|----------|
| Overall ANOVA                    | 3.20**   |
| Covariates                       |          |
| Maternal Demandingness           | 4.50*    |
| Paternal Demandingness           | 6.50*    |
| Main Effects                     |          |
| Maternal Employment              | 1.31     |
| Satisfaction with Employment     | 3.25     |
| Satisfaction with Work           | .09      |
| Interactions                     |          |
| Mat Emp x Satisfaction with Emp  | 5.56**   |
| Mat Emp x Satisfaction with Work | .72      |

\* $p < .05$ , \*\* $p < .01$